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MARCH 1989

ELECTRIC LIGHT & POWER

EL&P

Volume 67, Number 3
A PENNWELL PUBLICATION

VOICE OF THE ELECTRIC UTILITY INDUSTRY

LATE NEWS

Westinghouse Electric Corp. and ABB Asea Brown Boveri Ltd. of Switzerland established joint ventures for electric transmission and distribution equipment in the U.S., Brazil and Argentina. Westinghouse owns 55 percent, of the new company, Westinghouse ABB Power T&D Co. Both parties have an option to reassess their ownership interest in 1990. Combined annual sales of the ventures are about $1 billion. Canada opposes the proposed sale of the transmission/distribution equipment business of Westinghouse Canada Inc. to ABB's Canadian subsidiary for fear of less competition in the large transformer market, but discussion continues. U.S. Justice Department opposition requires divestiture of ABB Electric Inc.'s transformer operation in Waukesha, WI, and squashed a generation joint venture.

Long Island Lighting Co. struck a deal with ratepayers and received a favorable court decision. See story, page 3.

PUC limits Midland use

LANSING, MI—State regulators issued a complex, interim order that requires Consumers Power Co. to cut by 48 percent a electricity sales contract with the Midland Cogeneration Venture (MCV).

The reaction at Midland Cogeneration Venture and CMS Energy Co.'s Consumers Power subsidiary was one of disappointment, but neither would comment in detail. Both are analyzing the order, and deciding how to respond.

Work continues on the 12-turbine, natural-gas, combined-cycle project, scheduled for commercial operation in January 1990.

Guidelines

In part, the Michigan Public Service Commission's Jan. 31 ruling establishes guidelines for cogeneration and small power production in Consumers' service territory.

The decision seems a response to more than 40 additional applications or complaints from other proposed cogenerators and small-power production qualifying facilities (QFs) that want to supply electrical power to Consumers.

Consumers contracted for up to 1240 MW of MCV electricity by 1995; the order cuts that to 638 MW initially, with options for review every two or three years. The order also:

- Caps the amount of total Consumers capacity purchases at 1160 MW, with not more than 55 percent coming from one project and no more than 75 percent from one fuel.
- Sets Consumers' avoided capacity rate at 3.77¢/kWh.
- Backloads capacity payments for natural gas or oil with a rate 25 percent lower than a levelized payment in order to reduce ratepayers' risk of premature shutdown of QFs. Coal- or peat-fired projects should be backloaded by 10 percent, the PUC said.
- Asks Consumers to try and renegotiate contracts that have already been signed [with MCV] to conform to these provisions, then negotiate for power from other projects.

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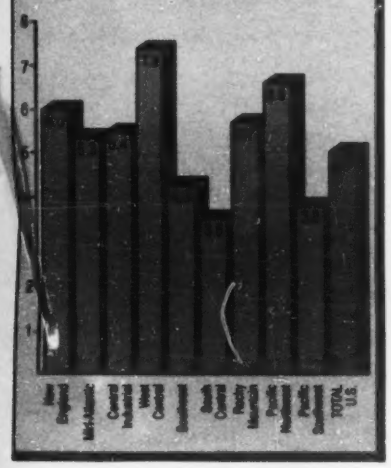
ELECTRIC OUTPUT

From 1987 to 1988 the net electrical energy sent out for the whole year by the electric industry in the contiguous 48 states increased by 5.0 percent, to 2.77-million GWh, according to the Edison Electric Institute. Note that the largest increase was in the West Central states, while the smallest was in the South Central region. However, in terms of overall sendout, the Southeast led with 629,000 GWh (ah, summertime), and the lowest was in New England with 111,000 GWh.



Judge delays PSNH rate case; federal vs. state authority next?

MANCHESTER, NH—Public Service of New Hampshire won a bankruptcy court injuction to delay a state-ordered rate case for six months to prevent what PSNH called "interference with reorganization" from state regulators.

The ruling did not address the state's intentions or motives in seeking a PSNH rate proceeding during the company's reorganization. PSNH would have had to divert attention from reorganization to work through a rate case, which could have raised or lowered rates.

Larger issues

On Feb. 22, shortly before this issue of EL&P went to press, Judge James E. Yacos planned to address the larger issue of whether or not utility reorganization in bankruptcy proceedings overrides state law. PSNH plans to reorganize primarily under federal jurisdiction. The state says it won't approve such a move.

In yet another matter, the PSNH argued that state Senate Bill 205 on government takeover should be rejected because it is based on false premises. The proposal would form a public authority and sell up to $2 billion in bonds to take over the utility. The state's attorney general has the issue of condemnation procedures before the state supreme court to determine constitutionality of a utility takeover. PSNH said any offer would have to be at fair market price, in excess of $2 billion. Northeast Utilities Co. bid more than $2 billion. All bids are due by the end of March.

Takeover premise may be tested

PSNH quoted PUC documents as saying a state takeover could lead to first-year rate increases as high as 40.29 percent. In contrast, PSNH proposed a one-time, 31-percent increase. In reorganization talks, the state has offered PSNH a rate increase of 4 percent annually for five years. PSNH said that despite recent events it hopes to return to

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CommEd cuts deeply to survive rate freeze

Mark T. Hoske
Assistant Editor

CHICAGO—Commonwealth Edison Co. must take "extraordinary steps" to maintain its financial health through a recently approved, $480-million, 9-percent rate increase over two-years, followed by a four-year rate freeze.

That translates to a 31-percent, 825-employee reduction in supervisors company-wide, although a smaller percentage will be cut from the nuclear area. The 825-employee cut will reduce management to 1825 through attrition and reassignment. Union employees, who comprise the balance of the company's 18,000 total workforce, will not be affected.

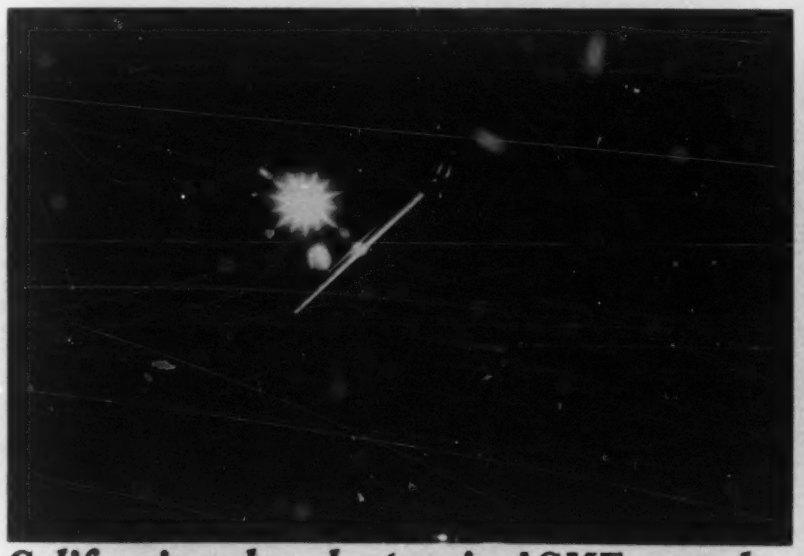
"Even with this rate relief, we must take extraordinary steps to control expenditures and insure our financial health," Chairman James J. O'Connor told employees.

One third of investment recovered

After the rates are fully implemented, CECo will recover only about one-third of its $7.1-billion investment in its last three nuclear plants, said company spokesperson John Hogan. A 27-percent, $1.4-billion increase was originally requested.

Hogan anticipates that the cutback program will save "well in excess of $10 million," but hesitated setting a specific target because of company critics.

Continued on page 9



California solar plants win ASME award

The Solar Electric Generating Systems (SEGS) plants won an ASME Energy Resources Technology Industry Award for their builder/owner, Luz International Ltd. The parabolic solar collectors focus on steel tubes surrounded by vacuum-insulated glass tubes to concentrate the sun's rays on a heat-transfer fluid. They are entirely privately financed. (See story on page 44.)

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News Briefs

JILL MINNER, Assistant Editor

APS buys developer of energy mgmt. systems

Arizona Public Service Co. has acquired Stagg Systems, a developer of energy management systems for electric utilities. Immediate plans for Stagg, which will become a wholly owned subsidiary of APS, include the establishment of a demonstration facility at APS' system control center in Phoenix, according to Glenn Stagg, president of the company.

California Energy adds four geothermal plants

California Energy Co. said it is adding four new generating plants to its Coso Project in Coso Hot Springs, CA. The company expects the first phase of its nine-unit, 230-MW geothermal complex to be completed in the fourth quarter of 1989. All electricity generated from the project will be sold under long-term power sales contracts with Southern California Edison Co., according to California Energy.

In other news, California Energy was cited by the California Energy Commission for its achievements in geothermal power production and environmental control technology, and received approval of its Navy II Project. The commission said that Navy II, located in Coso Hot Springs, CA, has the highest environmental regulatory standards in the nation.

Niagara Mohawk seeks proposals for 350 MW

Niagara Mohawk Power Corp. will seek proposals from independent power producers for 350 MW of electric capacity through a competitive bidding program. The utility predicts it will need the extra power by 1994. Niagara Mohawk said it is awaiting approval of its bidding procedures by the New York State Public Service Commission and expects its first bid request later this year.

GE, Alsthom start gas turbine co. in Europe

According to General Electric Co. (USA), Alsthom of France and General Electric Co. (UK) signed a Memorandum of Understanding to establish a European gas turbine company. The principal assets of Alsthom's Gas Turbine Division and the GE (UK) Ruston Division will be included in the new company. Ruston designs and builds industrial gas turbines and Alsthom builds heavy duty gas turbines as a GE licensee. GE (USA) said it will hold one third of the company's equity.

Coal-fired beat hydro in '88 at Idaho Power

Idaho Power Co. said that in 1988 its share of jointly owned coal-fired plants produced more energy than all of its hydroelectric plants combined. For the first time in the company's 74-year history coal accounted for 51 percent of Idaho Power's total output, while hydro generated 49 percent. During normal streamflow conditions, hydro usually produces about 65 percent of the generation, according to the utility.

Financial restructuring to save Detroit Edison over $10M in next 5 yrs

Detroit Edison expects to save at least $10.5 million over the next five years due to the restructuring of its $400-million nuclear fuel financing arrangement. Detroit Edison Vice Chairman and Chief Financial Officer Ernest L. Grove Jr. said one of the major cost-saving changes involved consolidating the entire financing package under one credit agreement. "As Fermi 2's nuclear fuel requirements increased over the years, our financing program became more complicated and more costly to administer," Grove explained. "We were dealing with credit agreements with five different banks as well as the heat purchase contract with Renaissance Energy." Grove added that Detroit Edison will also benefit from renegotiated fees with Renaissance Energy and other parties involved in the financing arrangement.

NRC issues report on the state of Palo Verde

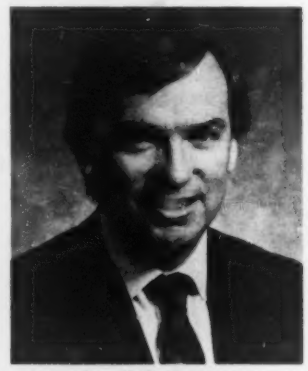
In its annual report on Arizona Nuclear Power Project's Palo Verde Nuclear Generating Station, the Nuclear Regulatory Commission found "satisfactory" performance with need for improvement. The NRC said the performance of Unit 3 was strong and Unit 2 displayed generally good performance, but Unit 1 operations were criticized. The NRC also criticized the radiation protection, safety assessment and quality verification in all three units. In reaction to the report, ANPP Executive Vice President Don Karner stated that, "Although the overall trend of the plant has been improving for the past several months, we can and will do better."

EPRI creates Customer Systems Division

The Electric Power Research Institute has formed a Customer Systems Division to help "...member utilities and their customers realize maximum value from electricity," according to the new head of the division, Vice President Arnold Fickett. The new organization, which supersedes the Energy Management & Utilization Division, is responsible for: developing electric technologies for the industrial, commercial, residential and transportation sectors; demand-side planning; market assessment; and power electronics and controls.

Kearney to head PG&E/ Bechtel joint venture

Joseph P. Kearney was appointed chief executive officer of a joint venture formed by Bechtel Power Corp. and PG&E Enterprises, a subsidiary of Pacific Gas and Electric Company. The venture will develop, manage, own and operate private non-utility electric generation facilities throughout the United States. "We believe that a growing part of the nation's future electricity needs will be met by non-utility generation. Our aim is to become a major player in this market and I know of no one better qualified than Joe Kearney to lead that effort," stated PG&E Enterprises President and CEO Mason Willrich. Kearney most recently served as chairman and CEO of Coastal Power Production Corp. and vice president for ANR Pipeline Company. The new venture's first project is a 35-MW coal plant now under construction in Colstrip, MT.



Joseph P. Kearney

Iowa-Illinois Gas and Electric reorganizes

Iowa-Illinois Gas and Electric Co. has reorganized in order to separate responsibility for the operation of its gas and electric business. John Daniel, previously vice president-operation, was named vice president-gas and customer service operation. Stephen Shelton moved from his position as vice president-energy supply and engineering to serve as vice president-electric operation. "These changes generally will separate the gas and electric responsibilities for the energy planning and supply, engineering and Quad Cities distribution activities," stated Iowa-Illinois President Barry O'Brien.

Westinghouse names Bakos vice president

Frank R. Bakos, general manager of Westinghouse Electric Corp.'s Power Generation Business Unit, was made a vice president of the company. Bakos, 51, joined Westinghouse in 1956 and has held positions in purchasing, contract management, financial planning, sales and marketing.

Safety assessment conference to be held

An international conference on probabilistic safety assessment will be held in Pittsburgh on April 2-7. The conference, PSA '89, is expected to attract over 600 safety and regulatory experts from 25 countries. The American Nuclear Society will sponsor the conference, with grants from Westinghouse Electric Corp., the U.S. Nuclear Regulatory Commission, General Electric Co. and Duquesne Light Company.

Training in electrical measurement offered

Specialized courses in several areas of electrical measurements on power distribution and power apparatus are being offered by Biddle Instruments at its technical school in Blue Bell, PA. The following courses are available: DC Testing of Power Apparatus Insulation, April 10-13; Partial Discharge Detection in Insulation Systems, May 1-5 and June 19-23; Earth Resistance Testing, May 22-23; and Cable Fault Locating in Power Systems, March 27-30 and June 5-8. For more information write Biddle Technical School, Biddle Instruments, 510 Township Line Road, Blue Bell, PA 19422, or call (215) 646-9200.

INPO names NPPD to National Academy for Nuclear Training

The Nebraska Public Power District was granted membership in the National Academy for Nuclear Training by the Institute of Nuclear Power Operations. The honor is extended to utilities whose nuclear training programs meet the highest standards of the nuclear utility industry. According to NPPD, it is the 51st electric utility to be named to the academy.

DOE picks contractor for Super Collider

The Department of Energy said it has signed a contract with Universities Research Association Inc. (URA) to be the management and operating contractor for the Superconducting Super Collider facility, now named the Ronald Reagan Center for High Energy Physics. URA, a consortium of 66 universities, will establish a laboratory organization to manage and administer the design, construction and commissioning of the Super Collider, followed by an optional five-year term for an initial operating phase. DOE said it has requested $250 million in the fiscal year 1990 budget for the Super Collider, including $160 million for construction and $90 million to continue research and development. The center, located in Ellis County, TX, will be directed by Roy Schwitters of the Harvard University Physics Department.

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Commission performance: a narrow path to walk

The difference between victory and defeat in battle is often some very small event or decision. In corporate decision-making, the question of whether an action will be legal or not often can be a fine line. So too in the art of regulating the actions and operations of electric utility organizations.

At best, regulators must walk a narrow path to provide adequate protection for the interests of ratepayers, while at the same time allowing sufficient fair return for utilities to ensure the power supply. All too often, however, that path is not clear enough, or regulators and staff may see their responsibilities in a different light. When that happens, one side or the other may find itself to have been disadvantaged, or wronged. And since most commissioners are either elected or appointed by the chief executive of the state, who is elected, pressures to act on behalf of consumers and ratepayers, regardless of the effect(s) on utilities, can be overpowering.

We were especially mindful of this seeming preference as we read through the opinion and interim order of the Michigan Public Utility Commission in the matter of the Midland Cogeneration Venture's application for approval of capacity charges contained in its contract with sister-organization, Consumers Power Co. A number of related cases—more than 40—were included and the entire matter of power supply requirements of Consumers Power, Public Utility Regulatory Policy Act of 1978, fuel use, rate effects, cogeneration and Qualifying Facility power was handled as a single, albeit complex consideration.

As discussed in the news story on page 1, the Commission has issued an interim order limiting the amount of power Consumers Power Co. can obtain from all external sources, as well as from the Midland Cogeneration Venture, specifying that not more than 55 percent can come from one facility and not more than 75 percent can be based on a single fuel.

On first reading, it appeared that the Commission had vastly overstepped its authority by injecting its own consumer-protective bias into the corporate decision-making process. But on further consideration, it appears that what may appear to be Commission bias is the result of the Commission trying to reduce the complexities of the entire Consumers power supply/state non-utility generation situation, as it now exists. At the same time, the Commission could fulfill its assigned responsibilities under PURPA rules. Moreover, by being switched out of the Consumers Power's rate base, and into a separate subsidiary, MCV no longer qualifies for utility consideration. It's just another "cogenerator."

It is true that the Commission may have resorted to what industry planners might consider to be simplistic methods at times. Also, one might criticize the Commission for its tardy attention to the problems dealt with in its interim decision. Admittedly, the time to have approached the utility about its plans to take a given portion of capacity from Midland would have been fairer to all concerned had it taken place during initial discussions about converting the former nuclear plant-to-be. Also, admitted Commission-staff conservatism tends to understate utility needs.

But what the Commission has elected to do is leave its options...and those of CMS and its Consumers Power and Midland Cogeneration Venture...open while stimulating development of non-utility financed capacity. By limiting Consumers' use of Midland power, the Commission seeks to force development of other non-utility power sources, which can be brought on-line relatively quickly should additional power be needed earlier than predicted.

This ruling contrasts with the Maine Commission's ruling in the matter of new facilities to be developed to take greater advantage of Canadian power by Central Maine Power Co., discussed last month. There, the Commission really usurped the company's prerogatives in the face of previous economic success and broad public and industry support. The Michigan Commission's interim order, we believe, has been thoughtfully and honestly determined in hopes of temporarily disposing of a number of complex issues in such a way that neither consumers, the utility nor potential non-utility generators is treated unfairly.

The decision may not be perfect, from any viewpoint. It seems to be, however, an honest attempt to be fair to all, without predjudice, by leaving the door open for another consideration two or three years down line, or perhaps sooner if needed.

Robert A. Lincicome, Editor-in-Chief

EL&P ELECTRIC LIGHT & POWER

Arthur L. Rice, Publisher

Robert A. Lincicome Editor-in-Chief

PennWell PUBLISHING COMPANY

312-382-2450 Fax: 312-382-2977

Editorial Staff
Henry Stein, Engineering Editor
Jill F. Minner, Assistant Editor
Mark T. Hoske, Assistant Editor
Dianne Wilson, Editorial Assistant
William Kenworthy, Legal/Regulatory Editor
Ted Pollock, Management Editor

Roberta C. Olmstead, Production Manager
918-832-9368

ELECTRIC LIGHT & POWER (USPS 858-860) is published monthly by the PennWell Publishing Company, 1421 S. Sheridan Road, Tulsa, OK 74112. © Copyright 1989 by PennWell Publishing Company. All rights reserved. Officers of PennWell Publishing Company are Philip C. Lauinger, Jr., Chairman/Chief Executive; Joseph A. Wolking, President; Joseph T. Bessette, Group Vice President; John Maney, Vice President/Finance. Electric Light & Power editorial offices are located at 1250 S. Grove Avenue, Barrington, IL 60010. Phone (312) 382-2450. Distributed to executives and engineers in U.S. electric utilities and consulting engineering firms. Second class postage paid at Tulsa, OK. Subscription $38 per year (U.S.), $66 (foreign), $108 (foreign air mail). Single issue price: $4 + postage ($7 - foreign; foreign). Copies of back issues are available on microfilm from Univ. Microfilm, 300 N. Zeeb Road, Ann Arbor, MI 48103, and on microfiche from Micro-Photo Div. of Bell & Howell, Old Mansfield Road, Wooster, OH 44691. POSTMASTER: Send address changes to ELECTRIC LIGHT & POWER, P.O. Box 2680, Tulsa, OK 74101.

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Canadians favor nuclear power supply: CNA survey

MONTREAL—Canadians are positive about nuclear power generation, according to a recent survey. Nearly 80 percent called nuclear energy a good or realistic choice for large-scale use.

Nuclear energy provides 15 percent of Canada's needs, compared to about 20 percent in the United States. Ontario, however, fills half its demand with nuclear power.

The Decima survey, for the Canadian Nuclear Association, reached 1200 adult Canadians in November 1988. It is considered accurate within 2.9 percent, 95 percent of the time. The results were cited in the December issue of *Nuclear Canada*, a newsletter by the Canadian Nuclear Association (CNA).

76% call nuclear an important source

Sixty-four percent of Ontarians favor nuclear energy for generation, compared with 51 percent nationwide. In Ontario, 89 percent believe nuclear energy is an important source, compared with 76 percent for all of Canada.

Eighty-one percent of Canadians said nuclear energy will be an important future energy source; and more than 60 percent favored nuclear energy as one of the ways to generate electricity. Exactly 90 percent said they would like more information about the nuclear industry.

"The results of this poll show that we Canadians have a good understanding of the need for electricity in this country and the important part nuclear energy plays in meeting our needs today and for the future," according to Rita Dionne-Marsolais, CNA vice president of information.

$4 billion Canadian nuclear industry

Canadian uranium mining creates annual export earnings of $1 billion. Worldwide, about 85 percent of the Cobalt 60 radioisotope is provided by Canada. In total, the nation's nuclear industry is a $4 billion-a-year business employing 100,000 people directly and indirectly, according to the Canadian Nuclear Association.

Canadian Attitudes Toward Nuclear Energy

	Canada	Atlantic	Quebec	Ontario	Prairies	British Columbia
Favor nuclear energy as one of the ways to generate electricity	61%	58%	56%	69%	60%	52%
Nuclear energy will be somewhat or very important as a future energy source	81%	84%	75%	92%	81%	67%
Nuclear energy is a "good" or "realistic" choice for large scale use	79%	80%	75%	83%	79%	69%
With continued economic growth there will be an increasing demand for electricity	87%	83%	87%	91%	88%	81%
Believe there is a lot of untapped water resources available for hydroelectric projects	16%	8%	25%	16%	9%	24%
Believe that coal has less environmental impact than nuclear energy	48%	61%	51%	44%	45%	47%
Agree that the nuclear industry is capable of handling its waste	34%	32%	36%	35%	31%	29%
Like to know a little more, something more, and a lot more about the nuclear industry	90%	90%	87%	90%	93%	93%

The survey randomly sampled - 1200 adult Canadians, 18 years of age and older, by telephone from Nov. 25 to 27, 1988. Results are accurate within ±2.9 percentage points, 95 percent of the time.

Source: Decima Research Survey November, 1988.

Railroad restructuring may slow coal shipping

WASHINGTON—Coal-fired utilities should invest in railroads to help guard against disruption of coal shipments from railroad restructuring—mergers, bankruptcies, line divestitures, consolidations and abandonments. So says a Utility Data Institute report.

"Since 1978, more than 42,000 miles of existing railroad line have been abandoned or consolidated through mergers and acquisitions, a reduction of about 22 percent," explained Charles H. Banks, report co-author, and staff member of R.L. Banks & Associates, a consulting firm.

"While the last five years have seen an unprecedented surge of new short-line and regional railroad-line development, major railroads will continue to consolidate traffic routing and eliminate surplus lines. Few coal-fired electric power plants or mines can expect to be immune from the effects of potential changes in ownership and operating practices of the component parts of their rail transportation supply network," Banks added.

Coal shipments represent 20-40 percent of railroad traffic volumes in the U.S. depending on the measure used. Electric utilities are the largest customer for this largest commodity hauled by Class I railroads, the report said.

A number of prudent actions

"We feel there are a number of prudent actions that coal shippers and customers can and should take to protect their long-term service, including major investment in railroad assets," said Walter H. Schuchmann, the co-author. "Almost 70 utilities and 10 coal suppliers now own or lease some 43,000 coal hopper and gondola cars for shipment of their plants' fuel supplies; a few utilities actually own railroads."

The report includes railroad restructuring activities, business development, implications for utility and coal industry managers and several case studies. For more information about the 50-page report call R.L. Banks & Associates at 202/296-6700 or UDI at 202/466-3660.